

U.S. Patent Application No. 09/736,820  
Amendment dated July 11, 2005  
Reply to Office Action dated April 13, 2005

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Previously presented) A floor surface covering comprising two or more polymeric flooring planks having edges, wherein said planks are connected to each other by a chemical welding agent, wherein said chemical welding agent is present on at least one of the edges of at least one of the planks, and wherein said chemical welding agent comprises at least one solvent that at least bonds the edges of the planks.

2. (Previously presented) The floor surface covering of claim 1, wherein said chemical welding agent consists essentially of tetrahydrofuran.

3. (Previously presented) The floor surface covering of claim 1, wherein said chemical welding agent consists of tetrahydrofuran.

4. (Previously presented) The floor surface covering of claim 1, wherein said chemical welding agent comprises tetrahydrofuran, cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone, methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, acetyl acetone, or combinations thereof.

5. (Currently amended) The floor surface covering of claim 1, wherein said chemical welding agent is present on at least each edge of each ~~thermoplastic~~ polymeric flooring plank connected together to another ~~thermoplastic~~ polymeric flooring plank.

6. (Previously presented) The floor surface covering of claim 1, wherein said chemical

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welding agent is present on two opposite edges of each individual plank.

7. (Previously presented) A method to connect two or more thermoplastic planks comprising the step of applying a chemical welding agent to at least one edge of a plank and then connecting an edge of a second plank to said edge having said chemical welding agent to connect the planks together;

wherein said chemical welding agent comprises at least one solvent capable of bonding at least the edges of the planks.

8. (Previously presented) The method of claim 7, wherein said chemical welding agent comprises tetrahydrofuran.

9. (Previously presented) The method of claim 7, wherein said chemical welding agent comprises tetrahydrofuran, cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone, methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, acetonyl acetone, or combinations thereof.

10. (Previously presented) The method of claim 7, wherein said chemical welding agent consists essentially of tetrahydrofuran.

11. (Previously presented) The method of claim 7, wherein said chemical welding agent consists of tetrahydrofuran.

12. (Previously presented) The method of claim 7, wherein said chemical welding agent is applied to each edge of each thermoplastic plank connected to another thermoplastic plank.

13. (Previously presented) The method of claim 7, wherein said chemical welding agent is applied to two or more edges of at least one plank.

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14. (Previously presented) The method of claim 7, wherein said chemical welding agent is applied with a brush.

15. (Previously presented) The method of claim 7, wherein said chemical welding agent is applied by spraying.

16. (Previously presented) The method of claim 7, wherein said chemical welding agent is applied by dipping at least one edge of said plank in a container containing said chemical welding agent.

17. (Previously presented) The method of claim 7, wherein said chemical welding agent is applied with a syringe-type applicator.

18. (Previously presented) The method of claim 7, wherein said step of applying said chemical welding agent is repeated to connect a multiplicity of planks together to form a surface covering.

19. (Previously presented) A floor surface covering comprising two or more polymeric flooring planks and splines located between at least a portion of said polymeric planks, wherein at least a portion of said planks and splines are connected to each other by a chemical welding agent comprising at least one solvent that chemically welds at least the spline and plank together, wherein said chemical welding agent is applied to at least one of the edges of at least one of the individual planks, splines, or both.

20. (Previously presented) The floor surface covering of claim 19, wherein said chemical welding agent comprises tetrahydrofuran, cyclohexanone, methylene chloride, dimethyl formamide, toluene, acetone, ethylene dichloride, methyl ethyl ketone, n-methyl pyrrolidone,

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methyl isobutyl ketone, dipropyl ketone, isophorone, methyl amyl ketone, nitrobenzene, methyl cyclohexanone, acetonyl acetone, or combinations thereof.

21. (Previously presented) A method to connect two or more thermoplastic planks with at least one spline connecting the planks comprising the step of applying a chemical welding agent comprising at least one solvent capable of at least chemically welding the plank and spline together to at least one edge of a plank, a spline connecting planks, or both, and then connecting an edge of a second plank to said spline to connect the planks together.

22. (Previously presented) The floor surface covering of claim 1, wherein said polymeric flooring plank is in the shape of a tile.

23. (Previously presented) The floor surface covering of claim 1, wherein said polymeric flooring plank has a polymeric core with a laminate affixed on the surface of the core.

24. (Previously presented) A method to connect two or more thermoplastic planks comprising the step of connecting two or more planks together wherein joints are formed between the connected planks; and applying a chemical welding agent to said joints;

wherein said chemical welding agent comprises at least one solvent capable of at least chemically welding the edges of the polymeric portion of the plank.

25. (Previously presented) The method of claim 24, wherein said chemical welding agent comprises tetrahydrofuran.

26. (Previously presented) The method of claim 24, wherein said chemical welding agent is applied through a nozzle.

27. (Previously presented) The floor surface covering of claim 1, wherein said chemical welding agent comprises at least two different solvents capable of at least bonding the edges of

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the polymeric portion of the plank.

28. (Previously presented) The method of claim 7, wherein said chemical welding agent comprises at least two different solvents capable of at least bonding the edges of the polymeric portion of the plank.

29. (Previously presented) A method to connect two or more thermoplastic planks with at least one spline connecting the planks comprising the step of preassembling the polymeric planks with at least one spline to form joints at least between the spline and planks;

applying a chemical welding agent to the joints to bond the planks and spline together; wherein said chemical welding agent comprises at least one solvent capable of at least chemical welding the edges of the polymeric portion of the plank, spline, or both.

30. (Previously presented) The method of claim 29, wherein said chemical welding agent is applied through a nozzle.

31. (Canceled)

32. (Canceled)